<u>IN THE CLAIMS</u>:

1. (Original) Applying a coating by a kinetic spray method comprising the steps of:

a) providing a powder of particles to be sprayed;

b) providing a supersonic nozzle comprising an outer tubular section with an inner wall and a flow regulator with the flow regulator received inside the inner wall and a flow gap defined between the inner wall and the flow regulator;

c) providing a heated main gas and entraining the particles in the main gas;

d) directing the entrained particles through the gap thereby accelerating the particles and directing the accelerated particles toward a substrate positioned opposite the nozzle; and

e) adhering the accelerated particles to the substrate to form a coating on the substrate.

2. (Original) The method as recited in claim 1, wherein step a) comprises providing particles having an average nominal median diameter of from 1 to 200 microns.

3. (Original) The method as recited in claim 1, wherein step a) comprises providing particles having an average nominal median diameter of from 50 to 150 microns.

4. (Original) The method as recited in claim 1, wherein step a) comprises providing particles having an average nominal median diameter of from 50 to 125 microns.

5. (Currently amended) The method as recited in claim 1, wherein step a) comprises providing particles of a metal, an alloy, a semiconductor, a ceramic, a polymer, [[a]] diamond or mixtures thereof.

6. (Original) The method as recited in claim 1, wherein step b) comprises providing a flow regulator comprising a biconical flow concentrator formed from a second cone and a third cone sharing a common base with the flow gap defined by the space between the common base and the inner wall.

7. (Original) The method as recited in claim 1, wherein step b) comprises providing a flow gap of from 1 to 5 millimeters between the inner wall and the flow regulator.

8. (Original) The method as recited in claim 1, wherein step b) comprises providing a flow gap of from 2 to 3 millimeters between the inner wall and the flow regulator.

9. (Original) The method as recited in claim 1, further comprising providing a plurality of holes through a base portion of the flow regulator and passing the entrained particles through the plurality of holes prior to directing the entrained particles through the gap.

10. (Original) The method as recited in claim 1, wherein step c) comprises providing a heated main gas at a temperature of from 200 to 1000 degrees Celsius.

11. (Original) The method as recited in claim 1, wherein step d) comprises accelerating the particles to a velocity of from 200 to 1200 meters per second.

12. (Original) The method as recited in claim 1, wherein step e) comprises adhering the particles to a substrate comprising at least one of a metal, an alloy, a semi-conductor, a ceramic, a plastic, or a mixture thereof.

13. (Original) The method as recited in claim 1, wherein step e) comprises forming a coating having a width of less than or equal to 1 millimeter.

14. (Original) The method as recited in claim 1, wherein step e) comprises forming a coating having a width of less than or equal to 1 millimeter without using a mask or stencil.

15. (Original) The method as recited in claim 1, wherein step e) comprises forming a spot coating having a diameter of less than or equal to 1 millimeter.

16. (Original) The method as recited in claim 1, wherein step e) comprises forming a spot coating having a diameter of less than or equal to 1 millimeter without using a mask or stencil.

17. (Original) The method as recited in claim 1, wherein step b) further comprises providing a tubular section having a first portion and a second portion with the second portion having a tapered shape.

18. (Currently amended) Applying a coating by a kinetic spray method comprising the steps of:

a) providing a powder of particles to be sprayed;

b) providing a supersonic nozzle comprising an outer tubular section with an inner wall and a flow regulator with the flow regulator received inside the inner wall and ~~a flow gap defined between the inner wall and the flow regulator~~ <u>the flow regulator comprising a biconical flow concentrator formed from a second cone and a third cone sharing a common base and a flow gap defined by the space between the common base and the inner wall</u>;

c) providing a heated main gas and passing the main gas through the gap;

d) entraining the particles in the main gas after it passes through the gap thereby accelerating the particles and directing the accelerated particles toward a substrate positioned opposite the nozzle; and

e) adhering the accelerated particles to the substrate to form a coating on the substrate.

19. (Original) The method as recited in claim 18, wherein step a) comprises providing particles having an average nominal median diameter of from 1 to 200 microns.

20. (Original) The method as recited in claim 18, wherein step a) comprises providing particles having an average nominal median diameter of from 50 to 150 microns.

21. (Original) The method as recited in claim 18, wherein step a) comprises providing particles having an average nominal median diameter of from 50 to 125 microns.

22. (Currently amended) The method as recited in claim 18, wherein step a) comprises providing particles of a metal, an alloy, a semiconductor, a ceramic, a polymer, [[a]] diamond or mixtures thereof.

23. (Cancelled)

24. (Currently amended) The method as recited in claim [[23]] <u>18</u>, wherein the flow regulator further comprises a hole and the particles are passed through the hole prior to being entrained in the main gas.

25. (Original) The method as recited in claim 18, wherein step b) comprises providing a flow gap of from 1 to 5 millimeters between the inner wall and the flow regulator.

26. (Original) The method as recited in claim 18, wherein step b) comprises providing a flow gap of from 2 to 3 millimeters between the inner wall and the flow regulator.

27. (Original) The method as recited in claim 18, further comprising providing a plurality of holes through a base portion of the flow regulator and passing the main gas through the plurality of holes prior to passing it through the gap.

28. (Original) The method as recited in claim 18, wherein step c) comprises providing a heated main gas at a temperature of from 200 to 1000 degrees Celsius.

29. (Original) The method as recited in claim 18, wherein step d) comprises accelerating the particles to a velocity of from 200 to 1200 meters per second.

30. (Original) The method as recited in claim 18, wherein step e) comprises adhering the particles to a substrate comprising at least one of a metal, an alloy, a semi-conductor, a ceramic, a plastic, or a mixture thereof.

31. (Original) The method as recited in claim 18, wherein step e) comprises forming a coating having a width of less than or equal to 1 millimeter.

32. (Original) The method as recited in claim 18, wherein step e) comprises forming a coating having a width of less than or equal to 1 millimeter without using a mask or stencil.

33. (Original) The method as recited in claim 18, wherein step e) comprises forming a spot coating having a diameter of less than or equal to 1 millimeter.

34. (Original) The method as recited in claim 18, wherein step e) comprises forming a spot coating having a diameter of less than or equal to 1 millimeter without using a mask or stencil.

35. (Original) The method as recited in claim 18, wherein step b) further comprises providing a tubular section having a first portion and a second portion with the second portion having a tapered shape.

Please add the following new claim.

36. (New) Applying a coating by a kinetic spray method comprising the steps of:

a) providing a powder of particles to be sprayed;

b) providing a supersonic nozzle comprising an outer tubular section with an inner wall and a flow regulator with the flow regulator received inside the inner wall and a flow gap defined between the inner wall and the flow regulator and with the flow regulator including a base portion defining a plurality of holes through the base portion;

c) providing a heated main gas and passing the main gas through the plurality of holes prior to passing the main gas through the gap and passing the main gas through the gap;

d) entraining the particles in the main gas after it passes through the gap thereby accelerating the particles and directing the accelerated particles toward a substrate positioned opposite the nozzle; and

e) adhering the accelerated particles to the substrate to form a coating on the substrate.